

12. *CENTURUS ALBIFRONS* (Sw.).

*Picus albifrons*, Sw. Phil. Mag. 1827, i. p. 439 ; Sund. Pic. p. 52 ; Cab. Journ. f. O. 1862, p. 324.

*Centurus santacruzi*, Bp. P. Z. S. 1837, p. 116 ; Sclater, Cat. A. B. p. 343.

We have hitherto called this species by Bonaparte's name ; but there can be no doubt that, as pointed out by Cabanis, it is the *P. albifrons* of Swainson. It is common in Southern Mexico and Guatemala.

13. *BUTEO ELEGANS*, Cassin ; Baird, B. N. A. p. 28.

Mr. le Strange's collection contains a single skin of this Buzzard, agreeing with Texan specimens collected by Mr. Dresser. We have also seen an example of it in a collection recently sent to M. Sallé from Orizava by M. Botteri.

14. *ORTALIDA VETULA*, Wagler, Isis, 1830, p. 1112, et 1832 p. 1227 ; Sclater, P. Z. S. 1859, p. 391.

*O. poliocephala*, Sclater, P. Z. S. 1856, p. 310.

Mr. le Strange's collection contains a single skin of this *Ortalida*, which he found "very common" in the tierra caliente of the Atlantic. He shot many on the road to Tampico, in April 1866. We believe that the Texan bird called by the American ornithologists *O. vetula*, *O. poliocephala*, and *O. maccalli* is probably referable to this species.

15. *ORTALIDA POLIOCEPHALA*, Wagler, Isis, 1830, p. 1112, et 1832, p. 1227.

Two skins of this species, in Mr. le Strange's collection, are the first we have met with. It is immediately distinguishable from the preceding by its larger size, longer tail, whiter belly, and the much broader terminal bands of the tail-feathers, which are fulvous and not pure white.

2. Notes on the Species of the Genus *Micrastur*. By P. L. SCLATER, M.A., Ph.D., F.R.S., and OSBERT SALVIN, M.A., F.L.S.

As in case of the *Asturinae*, to which we have lately called the Society's attention\*, some of the members of the genus *Micrastur* are at present in a state of great confusion. We trust that the following remarks may serve to render the species of the group with which we are acquainted more readily distinguishable.

The genus *Micrastur*, established by Mr. G. R. Gray in 1841†

\* See P. Z. S. 1869, p. 129.

† List of Genera of Birds, p. 6.

(in the place of *Brachypterus* of Lesson, previously employed), embraces a series of American Hawks with the general structure of *Accipiter*, but distinguished by their short toes and more rounded tail. We have examined specimens of seven species of it, which may be shortly distinguished as follows :—

- A. Majores: subtus albi fere unicolores.  
 a. major, supra nigricans..... 1. *M. semitorquatus*.  
 b. minor, supra cinereus ..... 2. *M. mirandollii*.  
 B. minores: subtus albi, dense transfasciati.  
 a. dorso rufo: pileo cinereo:  
 a''. minor: dorso dilutius rufo ..... 3. *M. ruficollis*.  
 b''. major: dorso saturatius rufo ..... 4. *M. zonothorax*.  
 b. dorso cinereo: pileo concolore:  
 a''. ventre imo et crisso albis immaculatis..... 5. *M. gilvicollis*.  
 b''. ventre imo et crisso cinereo transfasciatis:  
 a'''. dorso dilutius cinereo ..... 6. *M. leucauchen*.  
 b'''. dorso saturatius cinereo ..... 7. *M. gucrilla*.

#### 1. MICRASTUR SEMITORQUATUS.

*Sparvius semitorquatus*, Vieill. N. D. x. p. 322, et Enc. Méth. p. 1263.

*Sparvius melanoleucus*, Vieill. N. D. x. p. 327, et Enc. Méth. p. 1267.

*Falco brachypterus*, Temm. Pl. Col. 116 (jr.) et 141 (adult.).

*Micrastur brachypterus*, Pelz. Orn. Novara, p. 12, et Orn. Bras. p. 7.

*Micrastur semitorquatus*, Schl. et Salv. Ibis, 1859, p. 218; Lawrence, Ann. L. N. Y. ix. p. 134.

*Climacocercus brachypterus*, Burm. Syst. Ueb. ii. p. 88.

*Falco leucomelas*, Licht. Doubl. p. 62.

*Carnifex naso*, Lesson, Rev. Zool. 1842, p. 379.

*Falco percontator*, Cabot, Boston Journ. iv. p. 462.

*Hab.* Rio Janeiro (*Natt.*); Mato Grosso (*Natt.*); Borba (*Natt.*); Rio Negro et Rio Branco (*Natt.*); Costa Rica (*Zeledon*); Guatemala (*Salvin*); Yucatan (*Cabot*).

This species, well known by the figures of the adult and young in Temminck's 'Planches Coloriées,' is widely distributed throughout Tropical America, from Yucatan to Paraguay. It does not, however, appear to occur in the wood-region of Eastern Brazil, nor have we yet seen specimens from New Granada and Ecuador. In Guatemala it seems to be rare, as Salvin only obtained one specimen from Retaluleu, in the forest-region bordering the Pacific. Another Guatemalan specimen, in the Norwich Museum, is probably from Vera Paz.

The large size of this bird renders it easily distinguishable from every other species of the genus.

#### 2. MICRASTUR MIRANDOLLII.

*Astur mirandollii*, Schl. Ned. Tijdschr. i. p. 130, et Mus. de P.-B. *Astures*, p. 27.

*Micrastur macrorhynchus*, Natt. MS.; Pelz. Orn. Novara, p. 21, et Orn. Bras. p. 7.

*Micrastur mirandollei*, Scl. et Salv. P. Z. S. 1867, p. 759.

*Hab.* Eastern Peru, Chyavetas (*Bartl.*); Rio Negro et Rio Branco (*Natt.*); Barra do Rio Negro (*Cast. et Dev.*).

This bird is most nearly allied to the preceding species, but is easily recognizable by its smaller size and slaty-grey upper plumage.

The only example of it in this country is, as far as we know, the specimen obtained by Mr. E. Bartlett in Eastern Peru, noticed in our article, P. Z. S. 1867, p. 759. As already mentioned there, Sclater has compared the typical specimen of *Astur mirandollii* in the Leyden Museum with an example of v. Pelzel's *Micrastur macrorhynchus* in the same collection, and has little doubt of their being identical.

In the Paris Museum there is a specimen of this bird collected by Castelnau and Deville at Barra do Rio Negro.

In its range this species appears to be restricted to the district of Upper Amazonia.

### 3. MICRASTUR RUFICOLLIS.

*Sparvius ruficollis*, Vieill. N. D. x. p. 322, et E. M. iii. p. 1263; Puch. R. Z. 1850, p. 91.

*Micrastur ruficollis*, Strickl. Orn. Syn. p. 122.

*Falco xanthothorax*, Temm. Pl. Col. 92.

*Climacocercus xanthothorax*, Burm. Syst. Ueb. ii. p. 85.

*Micrastur xanthothorax*, Pelz. Orn. Bras. p. 7.

*Hab.* S.E. Brazil (*Burm.*); S. Paulo (*Natt.*); Goyaz (*St.-Hilaire*).

The adult of this species is well figured in Temminck's 'Planches Colorées,' no. 92. It is easily recognizable by its deep rufous, almost chestnut breast. In younger specimens this colour is only partially apparent, and the bars on the belly are much wider apart; but in all stages we have seen the reddish-brown back is more or less persistent, thus distinguishing it from *M. leucauchen*.

Our specimens of this bird are from Rio and Bahia. Natterer obtained it in the Province of San Paulo, and St.-Hilaire in that of Goyaz.

### 4. MICRASTUR ZONOTHORAX.

*Climacocercus zonothorax*, Cab. J. f. O. 1865, p. 406.

*Micrastur zonothorax*, Scl. et Salv. P. Z. S. 1869, p. 253.

*Hab.* Puerto Cabello; Bogota.

Dr. Cabanis has lately separated this bird as a northern representative of the preceding, stating that it differs in its larger size, stouter bill, and in the darker reddish-brown of the upper surface, also in having the red-brown on the lower surface confined to the throat and not extending over the breast.

We have not yet met with the adult of this species, but have referred to it a bird in immature plumage collected by Mr. Goering in the coast-region of Porto Cabello, which is the same district as that whence Cabanis's type specimens were derived. A second immature bird, in the collection of Salvin and Godman, is from Bogota.

## 5. MICRASTUR LEUCAUCHEN.

*Falco leucauchen*, Temm. Pl. Col. 306.

*Micrastur leucauchen*, Strick. Orn. Syn. p. 123.

*Micrastur gilvicollis* (adult.), Pelz. Orn. Nov. p. 10.

*Hab.* Brazil; Bahia (*Wucherer*); Mato Grosso (*Natt.*).

This *Micrastur* is immediately distinguishable from *M. ruficollis* by its grey back and by the entire absence (in the adult bird) of any rufous colouring upon the throat and breast. In specimens not quite mature there is a rufous tinge upon the breast, which has apparently caused the species to be confounded in most collections with *M. ruficollis*. As in the latter bird, the belly is regularly banded continuously down to the crissum. This character and its paler upper surface serve to distinguish it from *M. gilvicollis*.

In his 'Planches Coloriées' (no. 306) Temminck has figured his *Falco leucauchen*, which has been regarded by most writers as being the young of the same author's *Falco xanthothorax* (= *Micrastur ruficollis*, Vieill.). Temminck does not expressly say whether his figure was taken from a specimen in the Paris Museum or in that of Vienna, both of which he states contain examples of this bird; but according to Schlegel (*Musée des Pays-Bas, Astures*, p. 51) Temminck's type is one of Natterer's specimens now in the Leyden Museum. To determine positively whether Temminck's figure is applicable to the young of the present species or to that of *M. ruficollis*, reference must be made to this type specimen, which we have not yet had an opportunity of doing. But to avoid the unpleasant necessity of giving a fresh name to the present bird, which is certainly a most distinct species, we propose for the present to use Temminck's name for it, bearing in mind that M. Pucheran, a very accurate observer, has stated that in his opinion naturalists have erred in considering Temminck's two names synonymous\*.

Three specimens of this Hawk, in the collection of Salvin and Godman, are from Bahia, and were received from Dr. Wucherer. An example which we regard as the adult, and of which we shall speak subsequently, was obtained by Natterer in Mato Grosso.

## 6. MICRASTUR GUERILLA.

*Micrastur guerilla*, Cass. Proc. Ac. Phil. iv. p. 87, et Journ. Ac. Phil. vol. i. p. 295, t. 40; Bp. Consp. Av. p. 30.

*Micrastur concentricus*, Scl. P. Z. S. 1856, p. 285.

*Micrastur gilvicollis*, Scl. et Salv. Ibis, 1859, p. 218; Scl. P. Z. S. 1858, p. 96; Scl. P. Z. S. 1860, p. 96; Lawr. Ann. L. N. Y. vii. p. 317.

*Micrastur xanthothorax*, Scl. P. Z. S. 1859, p. 368.

*Hab.* Mexico, Jalapa (*Cassin*); Cordova (*Sallé*); Guatemala (*Salvin*); Veragua (*Arcé*); Western Ecuador, Nanegal (*Fraser*).

We have long been well acquainted with this *Micrastur*; Salvin obtained specimens of it in every stage of plumage during his expeditions to Guatemala, and it is also common in Mexican collections;

\* Rev. Zool. 1850, p. 91.



but we have hitherto wrongly referred it to its southern representative *M. gilvicollis*, in which other authors have followed us. In its plumage above, this present bird very much resembles that species; but beneath the narrow grey bands are closer together, and are continued regularly over the thighs, belly, and crissum, whereas in *M. gilvicollis* they gradually disappear, leaving these parts nearly white. In the adult of *M. guerilla* also there appear to be three distinct white tail-bands besides the narrow terminal band; in the adult *M. concentricus* the normal number seems to be one, or sometimes two.

Cassin founded his *Micrastur guerilla* upon immature specimens obtained by Mr. Pease near Jalapa in Mexico, and has figured the bird in this plumage. As already stated, we have seen other examples in the numerous collections recently made in the same district. In Guatemala Salvin found it common in all the lowlands of the Atlantic slope. From Veragua Arcé has transmitted individuals both in the adult and immature plumages. We have not yet seen it from Panama; but it certainly extends as far south as Western Ecuador, where Mr. Fraser obtained an adult specimen in 1859. This bird is now in the collection of Salvin and Godman.

#### 7. MICRASTUR GILVICOLLS.

*Sparvius gilvicollis*, Vieill. N. D. x. p. 323, et Enc. Méth. p. 1264; Puch. Rev. Zool. 1850, p. 91.

*Micrastur gilvicollis*, jr., Pelz. Orn. Novara, p. 10, et Orn. Bras. p. 7; ScL. et Salv P. Z. S. 1867, p. 590.

*Nisus concentricus*, Less. Tr. d'Orn. p. 60; D'Orb. Voy. Ois. p. 88.

*Climacocercus concentricus*, Cab. in Tsch. F. P. pp. 18, 98, et in Schomb. Guian. iii. p. 735; Burm. Syst. Ueb. ii. p. 87.

*Hab.* Cayenne (Less.); Eastern Peru (Tsch.); Bolivia (D'Orb.); Rio Negro, Barra and Para (Natt.).

Vieillot's *Sparvius gilvicollis* was founded upon a specimen in the Paris Museum, which Pucheran, in one of his articles upon Vieillot's types, declares to be the same as *M. concentricus*. Now, although *Falco concentricus* is an old MS. name of Illiger's, it was first published by Lesson, and based upon a specimen brought by Poiteau from Cayenne, likewise in the Paris Museum. It follows that M. Pucheran, having had the two types before him, had an excellent opportunity of arriving at the result which he came to.

Our worthy friend Herr von Pelzeln, of Vienna, has, however, recently come to a different conclusion, and, in his treatise on the birds of the Novara Expedition, has treated *M. gilvicollis* and *M. concentricus* as different species. This caused us no small perplexity, until, with his usual kindness, Herr v. Pelzeln transmitted to us for examination the whole series of specimens of these two supposed species upon which he had founded his remarks. We trust that our good friend will pardon us, if, in the interests of science, we state that, after inspection of the specimens and comparison of them with others now before us, we have arrived at a somewhat different conclusion.

It is certain that the bird from Mato Grosso, which Herr v. Pelzeln regards as the adult of his *M. gilvicollis*, is distinct from his *M. con-*

*centricus*; but, as we have already stated, we believe that this bird should be referred to the Brazilian species which we have termed *M. leucauchen*. The younger specimens, called *M. gilvicollis* by Herr v. Pelzeln, in spite of the number of tail-bands, we consider referable to the present bird, which he calls *M. concentricus*.

One of the main points which Herr v. Pelzeln urges as distinguishing his *M. gilvicollis* from his *M. concentricus* is that the former has in every age and sex, besides the termination, three white tail-bands, whereas the latter has usually only one, but sometimes two. But we do not consider this character altogether to be relied upon, it being notoriously variable in other species of Accipitres. When it is discarded there is, as far as we can see, nothing to prevent us associating the two immature female birds from the Amazonian district, which Herr v. Pelzeln refers to *M. gilvicollis* (as distinguished from *M. concentricus*), with the present species.

We may also urge that this interpretation is more consonant with the phenomena of geographical distribution, it being *primâ facie* unlikely that two so closely allied species should be found maintaining their distinctive characters in the same area.

All the specimens of the present species which have come before us with ascertained localities have been either from Guiana or from some part of Amazonia, which we regard as belonging to the same fauna. Natterer's specimens were collected at Para and upon the Rio Negro. Other specimens we have seen are from Cayenne and the Lower Amazon. Tschudi's Peruvian specimens have no doubt been correctly referred by Cabanis to the present bird; but we have not yet had an opportunity of ascertaining to which species D'Orbigny's Bolivian examples belong.

### 3. On the Fishes of Orissa.

By Surgeon FRANCIS DAY, F.Z.S., F.L.S.—Part II.\*

Amongst the Siluroids, I captured one small specimen of a *Hara* in Orissa, which I left undescribed; I have since taken many more, and compared them with those in the Calcutta Museum. It is the

#### 78. HARA BUCHANANI, Blyth.

D.  $\frac{1}{6}$  | 0. P.  $\frac{1}{6}$ . V. 6. A.  $\frac{3}{7}$ . C. 15.

Length of head  $\frac{1}{4}$ , of caudal  $\frac{1}{5}$  of the total length. The bases of the first dorsal and anal fins are of the same length, and equal the distance from the posterior margin of the orbit to the end of the snout. The length of the base of the adipose dorsal is only equal to one-half of that of the anal. Height of body equals the length of the head; the width of the head opposite the opercles equals  $1\frac{1}{2}$  its length.

Eyes small, situated in the posterior half of the head.

Gill-openings narrow, the skin confluent with that of the isthmus.

\* See P. Z. S. 1869, p. 292.